

XXXIII.—*On the Reptiles and Batrachians obtained in Morocco by M. Henry Vaucher* *. By G. A. BOULENGER.

FOR the last few years M. H. Vaucher, established in Tangier, has been collecting Reptiles and Batrachians for the British Museum. Himself interested in zoology, he has taken care to send whatever specimens appeared to him new or interesting, together with representatives of the commoner species; so that the following account may be regarded as referring to all the forms which M. Vaucher has come across in the district where he resides.

Where not otherwise stated the Reptiles enumerated in the following list are from the vicinity of Tangier and are preserved in the British Museum.

REPTILIA.

LACERTILIA.

1. *Tarentola mauritanica*, L.
2. *Agama Bibronii*, A. Dum.
3. *Trogonophis Wiegmanni*, Kaup.
4. *Lacerta ocellata*, var. *tangitana*, Blgr.

Since the description of this interesting form appeared five more specimens have been sent, bringing the number up to eleven, which present the following variations in the number of scales and femoral pores:—

| | Scales across the middle of the body. | Transverse rows of ventrals. | Transverse rows of gular scales. | Femoral pores. |
|--------------------|---|------------------------------------|--|-------------------|
| 1. ♂, type | 96 | 31 | 26 | 18—18 |
| 2. ♂ " | 83 | 29 | 25 | 18—17 |
| 3. Yg. " | 90 | 28 | 28 | 18—19 |
| 4. Yg. " | 100 | 30 | 28 | 18—19 |
| 5. Yg. " | 95 | 30 | 28 | 18—19 |
| 6. Yg. " | 80 | 29 | 27 | 18—18 |
| 7. ♂ | 89 | 29 | 27 | 17—17 |
| 8. ♂ | 78 | 30 | 24 | 18—17 |
| 9. ♂ | 80 | 29 | 26 | 19—21 |
| 10. ♀ | 77 | 32 | 26 | 19—18 |
| 11. Hgr. | 86 | 30 | 26 | 18—18 |

* For the latest account of the herpetological fauna of Morocco the reader is referred to Dr. O. Boettger's important paper in Abh. Senck. Ges. 1:83.

5. *Lacerta muralis*, Laur.

In every respect undistinguishable from Spanish and Portuguese specimens.

6. *Psammodromus microdactylus*, Bttg.

The number of specimens sent by M. Vaucher now amounts to twenty-one. In addition to these I have also examined two from Mogador, collected by Lieut. Quedenfeldt and kindly sent to me for the British Museum by Prof. F. E. Schultze. I am thus enabled to draw up the following supplementary notes on this little-known species, which has not hitherto been found out of Morocco.

The number of femoral pores varies from 10 to 13 on each side, the usual number being 12. The coloration of the upper parts in fresh specimens varies from pea-green to olive, with or without brown or black spots, which may be mixed with white, as in *P. hispanicus*; a more or less distinct brown or reddish lateral band is constantly present; lower surfaces white, outer row of ventrals lemon-yellow; throat of males bluish. Young with small black and white ocelli on the sides; upper lip pure white; a pure white black-edged streak from the eye to above the tympanum and a second from the angle of the mouth through the lower half of the tympanum to the axil.

7. *Psammodromus algirus*, L.8. *Acanthodactylus vulgaris*, var. *lineomaculatus*, D. & B.9. *Chalcides ocellatus*, Forsk.

The specimens, four in number, sent by M. Vaucher from Tangier belong to the colour-variety which I have designated as var. C in the 'Catalogue of Lizards.' The upper surfaces are bronzy brown above, without any spots, except in some specimens a small basal margin to each scale, and with a light pale brown or golden upper and a black lower lateral band; lips with black and white tessellation. They have 32 scales round the body. I may here remark that a specimen from Assab, collected by Dr. Ragazzi and recently communicated to me by the Marquis Doria, has only 24 scales round the body; it differs from the typical form (A) only in the absence of ocelli on the back. The variation in the number of longitudinal rows of scales therefore ranges from 24 to 38 in this species.

10. *Chalcides lineatus*, Leuck.

The Algerian "Seps" belonging to the Italian species *C. tridactylus*, it is interesting to find the form of Tangier to be referable to the Western species *C. lineatus*, previously known only from the South of France and the Spanish peninsula. The three specimens sent by M. Vaucher present the following characters:—

- A. Hind limb contained 15 times in the length of head and body (from snout to vent 135 millim.; hind limb 9). 24 scales round the body. 9 dark streaks along the back, as broad as the interspaces between them.
- B. Hind limb contained 15 times in the length of head and body (from snout to vent 120 millim.; hind limb 8). 24 scales round the body. Uniform bronzy olive.
- C. Hind limb contained 14 times in the length of head and body (from snout to vent 97 millim.; hind limb 7). 24 scales round the body. Uniform bronzy olive.

In two of the specimens the hind limb is thus seen to be slightly shorter than in any European example which has yet come under my notice; in these its length is comprised from 12 to 14 times in the length of head and body. These Moroccan specimens also differ from the European, as well as from *C. tridactylus*, in having the ear-opening somewhat larger.

11. *Chalcides mionecton*, Bttg.

A single specimen, otherwise typical, is of particular interest from the feet being penta- instead of tetradactyle. The fifth toe is, it is true, short and clawless, but nevertheless perfectly distinct.

OPHIDIA.

12. *Coronella Amalieæ*.

Rhinechis Amalieæ, Bœttg. Zool. Anz. 1881, p. 570, and Abh. Senck. Ges. xiii. 1883, p. 93, pl. i. fig. 1.

Two specimens, from the Benider Hills, one of which has been kindly compared with the type of *Rhinechis Amalieæ* by my friend Dr. Bœttger.

Snout prominent; rostral as long as broad, produced posteriorly between the internasals, the portion seen from above about half as long as its distance from the frontal; suture between the internasals one third the length of that between

the præfrontals; frontal a little longer than its distance from the end of the snout, a little shorter than the parietals; loreal longer than deep; a single præocular; two postoculars; temporals 2+3; eight upper labials, fourth and fifth entering the eye; four lower labials in contact with the anterior chin-shields; posterior chin-shields three fourths the length of the anterior. Scales in 21 rows. Ventrals 190-193; anal divided; subcaudals 63-64. Grey-brown above, with reddish-brown spots and four rather indistinct dark longitudinal bands; vertebral region light; a pair of elongate dark brown spots on the nape; a black streak on each side of the head, from the nostril, through the eye, to the angle of the mouth; a dark cross band between the eyes, crossing the præfrontals; a black line below the eye, on the suture between the fourth and fifth upper labials. Lower surfaces coral-red, with quadrangular black spots.

Total length 39 centim.; tail 72.

This species is intermediate between *C. austriaca* and *C. girondica*, agreeing with the former in the size and shape of the rostral shield, with the latter in the number of upper labials, the scaling of the body, and the coloration of the lower parts.

13. *Tropidonotus viperinus*, Daud.

14. *Zamenis hippocrepis*, Merr.

15. *Cælopeltis lacertina*, Wagl.

16. *Psammophylax cucullatus*, Geoffr.

A single specimen, with 21 rows of scales, 173 ventrals, and 49 subcaudals. Belly with small black spots.

CHELONIA.

17. *Clemmys leprosa*, Schw.

BATRACHIA.

ECAUDATA.

1. *Rana esculenta*, var. *ridibunda*, Pall.

Entirely agrees with the Spanish and Portuguese frog, which I likewise refer to *R. ridibunda*.

The following are measurements of four female specimens from Tangier:—

| | <i>a.</i> millim. | <i>b.</i> millim. | <i>c.</i> millim. | <i>d.</i> millim. |
|--|----------------------|----------------------|----------------------|----------------------|
| From snout to vent..... | 85 | 69 | 69 | 65 |
| Length of tibia | 45 | 37 | 35 | 35 |
| Length of foot (from outer metatarsal tubercle)..... | 45 | 37 | 34 | 34 |
| Length of inner toe | 13 | 11 | 10 | 10 |
| Length of inner metatarsal tubercle | 4 | 3 | 3 | 3 |

2. *Bufo mauritanicus*, Schleg.

3. *Hyla arborea*, var. *meridionalis*, Bttg.

4. *Discoglossus pictus*, Otth.

CAUDATA.

5. *Salamandra maculosa*, var. *algira*, Bedr.

Numerous specimens from the Benider Hills.

Spots few, roundish, and forming a single straight or zigzag series on the back instead of being in pairs as is usually the case in this species. The spots are usually arranged as follows: one on each eyelid, one on one of the parotoids, right or left, from three to five on the body, one at the base of each limb, and a few on the tail. With regard to the proportions, they agree with Algerian specimens.

In the following table I give the dimensions of four Salamanders from Morocco (*a-d*) and of two from Oporto (*e, f*) for comparison:—

| | <i>a.</i> millim. | <i>b.</i> millim. | <i>c.</i> millim. | <i>d.</i> millim. | <i>e.</i> millim. | <i>f.</i> millim. |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| From snout to vent.. | 86 | 73 | 62 | 47 | 73 | 54 |
| Tail | 77 | 65 | 55 | 43 | 58 | 39 |
| Third toe | 8 | 6.5 | 5 | 4 | 6 | 5 |
| Fifth toe | 3 | 3 | 2 | 2 | 2 | 1.5 |

This is the first record of *S. maculosa* in Morocco.

6. *Molge Waltlii*, Michah.

Charf-la-Kaab, 10 miles from Tangiers.

XXXIV.—Description of a new *Batrachian* of the Genus *Eupemphix* from *Trinidad*. By G. A. BOULENGER.

Eupemphix trinitatis.

Head small; snout prominent, much shorter than the diameter of the orbit, with vertical lores; interorbital space a